PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY To: **PCT** STEVEN W. STEWART DIGIMARC CORPORATION 19801 SW 72ND AVE. SUITE 100 TUALATIN, OR 97062 WRITTEN OPINION (PCT Rule 66) 18 MAR 2004 Date of Mailing (day/month/year) REPLY DUE Applicant's or agent's file reference within 2 months/days from the above date of mailing P0565 International filing date (day/month/year) Priority date (day/month/year) International application No. 22 December 2000 (22.12.2000) 21 December 2001 (21.12.2001) PCT/US01/50483 International Patent Classification (IPC) or both national classification and IPC IPC(7): G06K 19/06 and US Cl.: 235/492 Applicant DIGIMARC ID SYSTEMS, LLC This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority. This opinion contains indications relating to the following items: Basis of the opinion II **Priority** Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Ш Lack of unity of invention ΙV Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Certain documents cited VΙ VII Certain defects in the international application Certain observations on the international application VIII The applicant is hereby invited to reply to this opinion. See the time limit indicated above. The applicant may, before the expiration of that time limit, request When? this Authority to grant an extension. See rule 66.2(d). By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. How? For the form and the language of the amendments, see Rules 66.8 and 66.9. For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6 If no reply is filed, the international preliminary examination report will be established on the basis of this opinion. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 22 April 2003 (22.04.2003) Name and mailing address of the IPEA/US Authorized officer. Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Telephone No. (703) 308 0956 Facsimile No. (703)305-3230

Form PCT/IPEA/408 (cover sheet)(July 1998)

WRITTEN OPINION

International application No.

PCT/US01/50483

I.	Basis of the opinion					
1.	With regard to the elements of the international application:*					
	the international application as originally filed the description: pages 1-11, as originally filed pages NONE, filed with the demand pages NONE, filed with the letter of					
	the claims: pages 12 and 13 , as originally filed pages NONE , as amended (together with any statement) under Article 19 pages NONE , filed with the demand pages NONE , filed with the letter of					
	the drawings: pages 1-2 , as originally filed pages NONE , filed with the demand pages NONE , filed with the letter of					
	the sequence listing part of the description: pages NONE, as originally filed pages NONE, filed with the demand pages NONE, filed with the letter of					
2.	With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following languagewhich is:					
	the language of a translation furnished for the purposes of international search (under Rule23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3).					
3.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:					
	contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form.					
	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing					
4.	has been furnished. The amendments have resulted in the cancellation of:					
	the description, pages none the claims, Nos. none the drawings, sheets/fig none					
5.	This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).					
	Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in is opinion as "originally filed."					

WRITTEN OPINION

International application No. PCT/US01/50483

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
1. STATEMENT				
Novelty (N) Cla	ims NONE YES			
Cla	ims <u>1-13</u> NO			
Inventive Step (IS) Cla	ms NONE YES			
Cla	ms <u>1-13</u> NO			
Industrial Applicability (IA) Cla	ims 1-13 YES			
Cla	ims NONE NO			
Leighton discloses a circuit card 10 with a core 33, bottom and does not disclose the laminate layer is a polyolefin. JP 11259 polyolefin. Leighton and JP 11259620A do not disclose that the 11259620A the use of polyolefin in circuit cards is old and we	Il known. It would have been obvious to a person of ordinary skill in and core in the card of Leighton to increase the durability due to the			

11259620A do not disclose the image surface. However, images on circuit cards, such as ID cards, printed in many ways including thermal printing and layering are old and well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an image on one of the surfaces of Leighton, as this would allow for positive identification of the

Claims 1-13 meet	the criteria set out in Pe	CT Article 33(4),	because the invent	tion is useful to	the industry.
	NEW CITATIONS				

JP 11259620 A (Unknown) 24 September 1999 (24/09/1999), see translated passage.

user and bearer of the card.

WRITTEN OPINION

International application No.

PCT/US01/50483

VI. Certain document cited

1. Certain published documents (Rule 70.10)

Application No
<u>Patent No.</u>
US 6,478,228 B1
US 2003/0038174 A1
US 2002/0070280 A1
US 2001/0002035 A1

Publication Date (day/month/year)
12 November 2002 (12.11.2002)
27 February 2003 (27.02.2003)
13 June 2002 (13.06.2002)

31 May 2001 (31.05.2001)

Filing Date (day/month/year)
22 December 1997 (22.12.1997)
22 December 2000 (22.12.2000)
22 December 1997 (22.12.1997)
29 November 2000 (29.11.2000)

Priority Date (valid claim)
(day/month/year)
27 December 1996 (27.12.1996)
None

27 December 1996 (27.12.1996) 29 November 1999 (29.11.1999)

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure

Date of non-written disclosure (day/month/year)

Date of written disclosure referring to non-written disclosure (day/month/year)

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Supplemental Box (To be used when the space in any of the preceding boxes is not sufficient)				
TIME LIMIT: The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.				
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Interna....al application No. PCT/US01/50483

NO

YES

NO

V.	Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1.	STATEMENT			
	Novelty (N)	Claims	NONE	YES
		Claims	1-13	NO
	Inventive Step (IS)	Claims	NONE	YES

Claims 1-13

Claims 1-13

Claims NONE

2. CITATIONS AND EXPLANATIONS

Industrial Applicability (IA)

Claims 1-13 lack an inventive step under PCT Article 33(3) as being obvious over Leighton US 6,036,099 in view of JP 11259620A. Leighton discloses a circuit card 10 with a core 33, bottom and toplaminate layers 38, a circuit 22 and an antenna coil 20. Leighton does not disclose the laminate layer is a polyolefin. JP 11259620A discloses a card with a protective layer, which may be made of polyolefin. Leighton and JP 11259620A do not disclose that the core is also made of a polyolefin. However, as seen in JP 11259620A the use of polyolefin in circuit cards is old and well known. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a polyolefin laminate and core in the card of Leighton to increase the durability due to the inherent nature of the polyolefin substance and the adhesion properties of the multiple polyolefin surfaces. Leighton and JP 11259620A do not disclose the image surface. However, images on circuit cards, such as ID cards, printed in many ways including thermal printing and layering are old and well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an image on one of the surfaces of Leighton, as this would allow for positive identification of the user and bearer of the card.

Form PCT/IPEA/409 (Box V) (July 1998)